

**Leland Initiative: Africa Global Information Infrastructure Gateway
Project (698-0565)**

Strategic Objective 3: End-User Applications

**Country Assessment and Action Plan
Mali**

Prepared for:

United States Agency for International Development
Africa Bureau, Office of Sustainable Development
USAID/Mali

Prepared by:

Zoey Breslar
Dana Ireland
United States Agency for International Development
Policy and Program Coordination Bureau
Center for Development Information and Evaluation
Research and Reference Services Project
Operated by the Academy for Educational Development

December 1996

TABLE OF CONTENTS

<i>Executive Summary</i>	i
1.0 Introduction	1
2.0 USAID/Mali's Sustainable Development Strategies	1
2.1 Leland Initiative's SO 1: Creating an Enabling Policy Environment	1
2.2 Leland Initiative's SO 2: Creating a Sustainable Supply of Internet Services	2
2.3 Rural Access	2
3.0 The Leland Initiative's Strategic Objective 3 Strategy	3
3.0.1 Assessment Process	3
3.0.2 Assessment Findings	4
3.1 Potential Fast-Track Organizations	4
3.2 Next Steps	5
3.2.1 USAID/Mali Staff and Potential Fast-track Institutions	5
3.2.2 Other Development Institutions	6
3.2.3 Internet Service Provider	7
3.2.4 Donors	7
3.2.5 Private Voluntary Organizations	8
4.0 Conclusion	8
Next Steps Matrix	9
Annex A: Leland Initiative Strategic Objective 3: End-User Applications Background	
Annex B: Interview Summaries and Organizations' Contact Information	
Annex C: Assessment Summary Matrix	
Annex D: Survey Tools	
Annex E: <i>Internet for Development: Applications and Training</i> Workshop	
Annex F: Summary of USAID/Mali SO Team Meetings	
Annex G: References	

Executive Summary

The Leland Initiative is a five-year, \$15 million USAID project bringing full Internet connectivity to 20 or more African nations. The Initiative's three strategic objectives (SOs) support fast-paced sustainable development by establishing an Internet-friendly policy environment (SO1); promoting a sustainable supply of Internet services (SO2); and developing a dynamic and growing user base capable of utilizing the Internet (SO3).

This report addresses Internet end-user issues and outlines an action plan to ensure appropriate user base development. Of the 43 organizations interviewed during the assessment, six potential pilot projects have been identified as fast-track partners, those most ready to begin applying the information and communication tools (i.e., the Internet) to the challenges of fast-paced sustainable development. USAID/Mali's assistance to these institutions would produce measurable results and through their example, be promoters of Internet use to other organizations. These organizations include:

- L'Ecole National Supérieur (ENSUP)- already a targeted project for USAID/Mali's Special Objective for Information and Communication. ENSUP will be an example of academic Internet use for other higher education facilities nation-wide.
- Le Comité de Coordination des Actions des ONGs au Mali (CCA ONG) - dedicated to the capacity building of Malian NGOs by providing resources to their members that support USAID/Mali's good governance strategic objective. One of CCA ONG's goal is to build a strong information and communication component into their members' activities.
- Le Mission de Décentralisation (Government of Mali) - implements an information strategy and understands the value of information dissemination which supports the missions' vision to use the Internet as a development information tool.
- Le Cellule de Planification et de la Statistique (Ministry of Health) - has already begun developing a national communication strategy to relay their data from rural sites to Bamako for collection and analysis. Under USAID/Mali's youth objective, the health sector staff and the Ministry of Health would provide a model for collaboration for research and development purposes.
- L'Institut d'Economie Rural (IER) - is the main agricultural research institute in Mali and has the mandate to develop and implement agricultural research programs, disseminate research results, and provide technical assistance to farmers. This program supports the development information component of USAID/Mali's SO2: to increase incomes in areas of high productive potential.
- The West Africa Enterprise Network/Mali (WAEN/Mali) - is involved with promoting private sector growth by addressing marketing activities and regional trade issues for local business people. USAID/Mali's SO2 team already has professional relationships with many

Network members.

These six institutions operate in a country where the policy environment is favorable towards creating a fair and competitive Internet Service Provider industry and end-user base. To sustain and mature Internet end-user demand, a USAID sponsored Internet training would effectively promote Internet use for sustainable development in Mali to USAID/Mali staff, USAID partners, and other institutions in Mali.

1.0 Introduction

The *Leland Initiative Strategic Objective 3 Country Assessment and Action Plan* was developed within the context of the mission's goal, that "Mali will achieve a level of sustainable political, economic and social development that eliminates the need for congressional foreign assistance". Within this context, the report provides USAID/Mali with concrete action steps to support effective Internet use for the staff, fast-track partners, and other organizations and to build a network of active users in Mali. (See Annex A: Leland Initiative Strategic Objective 3: End-User Applications Background.)

2.0 USAID/Mali's Sustainable Development Strategies

USAID/Mali's Special Objective for Information and Communication spearheaded the mission's use of communications technology throughout its three Strategic Objectives (SO1 - the empowerment of youth to become responsible, contributing citizens; SO2 - sustainable growth of Mali's economy; and SO3 - good governance). As a result, USAID/Mali works with their partners and beneficiaries to include, within their development activities, an information component. The Leland Initiative builds on this effort by providing the tools and technical assistance needed.

2.1 Leland Initiative's SO 1: Creating an Enabling Policy Environment

USAID/Mali's mandate, along with that of the Leland Initiative, complements the Government of the Republic of Mali's (GRM) own development strategies. These include:

- decentralization for an increased participation of the civil society, requiring that information be available to all citizens (especially those in rural areas)
- the modernization and strengthening of the telecommunications sector
- increased private investments
- increased exports
- a more efficient education system

Since taking office in 1993, President Konaré has promoted Internet use, particularly through private sector development, as one of the development tools to achieve the country's objectives. However, there is a need for awareness-building with regard to this technology and its applications throughout Mali.

On August 6, 1996, Leland's SO1 team negotiated a Memorandum of Understanding (MOU) between the U.S. Government and the GRM which states that the two governments will "cooperate in a mutual effort to establish a national Internet gateway". This formal agreement allows the United States to provide Mali with full Internet connectivity and technical assistance to ensure that reliable, competitive, and cost-effective services for accessing the Internet are available. Since there are currently no regulations that prohibit Internet services,

the Ministry of Culture and Communications is developing policies that will help guide the technology's installation and development. As agreed upon in the Leland MOU, SOTELMA (La Societe des Telecommunications du Mali), the parastatal responsible for the telephone trunk lines and services, will own and operate the national Internet node.

2.2 Leland Initiative's SO2: Creating a Sustainable Supply of Internet Services

There are four organizations that provide e-mail services in Mali: SITA, BINTTA, ORSTOM, and Spider. At the time of this assessment, these four organizations cumulatively serviced about one thousand e-mail users.

It is was reported that obtaining reasonably priced leased lines from SOTELMA in a timely fashion was difficult. Requests for external network connections go through a lengthy bureaucratic process and authorization is given only on a case-by-case basis by SOTELMA. When approval is given, SOTELMA states that for a 64kpbs leased line it charges, on average, 2,500,000 CFA (approximately \$5,000) a month for an X25 connection. However, SITA stated that it pays 4,000,000 CFA (approximately \$8,000) a month for a leased line.

All four organizations interviewed charge an initiation fee (which may include installation, training, and software); a monthly service charge; and a per kilobyte message charge to its clients. Initiation fees range from 50,000 CFA to 200,000 CFA (approximately \$100 to \$400), and monthly fees range from 5,000 CFA to 50,000 CFA (approximately \$10 to \$100). For each message sent and received a 200 CFA (approximately \$.40) per kilobyte is charged.

The two most commonly heard complaints about local e-mail service was that these organizations do not stock interfacing software and modems to support e-mail user needs and are weak on technical customer support (i.e., unable to trouble-shoot client problems in a timely manner if at all). In Bamako, there are office supply stores that sell personal computers, xerox machines, etc. However, none stocked the interfacing e-mail software or modems. It was recommended by several e-mail users that as the Internet Service Provider (ISP) industry develops in Mali, each ISP should supply modems and interfacing software to Internet users.

2.3 Rural Access

Wireless technologies are employed in the rural regions of Mali to provide a mode of communication to areas that were left behind by the old telephone infrastructure. SOTELMA was providing VSAT connections to the north (i.e., Douentza, Zegoua, Kouri, Deboly, and Nara) at the time of the Leland Initiative's SO2 assessment. However, there is a great deal of demand (with an approximate waiting list tallying over 10,000) for telephone service within Bamako and from Bamako to other cities. The Leland team recommended that wireless technology development include the telecommunication strategy for the urban sector as well since demand for telephone lines exceed the existing supply.

3.0 The Leland Initiative's Strategic Objective 3 Strategy

The purpose of the Leland Initiative in Mali is to bring the benefits of the global information highway to the country through Internet connectivity. The first step needed to achieve this objective requires increasing the supply of connectivity. The first step is followed closely by the second step which requires creating a demand to successfully apply this connectivity to the challenges of sustainable development information efforts. In keeping with these steps the Leland Initiative SO3 team developed assessment tools and training approaches that would identify and support an Internet Service Provider industry and a dynamic and growing user base. The tools used by the Leland Initiative SO3 team included:

- *Internet readiness assessments and strategy development:* the SO3 team assesses the Internet readiness of USAID field missions and their host country development partners. The objective of this assessment is to identify the fast-track USAID partners to serve as pilot projects and develop a strategy to integrate Internet use in development activities.
- *Internet applications training:* the SO3 team conducts a workshop which includes training, brainstorming, and action planning activities to provide Internet tools that may be incorporated throughout USAID/Mali and their development partners' activities.
- *Demonstration Pilot Projects:* the End-User Application Country Assessment and Action Plan for each field mission is a report summarizing the assessment findings and pilot projects recommended to demonstrate the application of Internet connectivity to specific development challenges.
- *Internet best practices:* the Leland Initiative SO3 team has begun to collect and disseminate information and lessons learned on the use of the Internet to foster sustainable development for decision-makers throughout the donor and host country communities.

3.0.1 Assessment Process

The Leland Initiative was geared toward working within the Strategic Objective teams established priorities. This process depended on the mission to identify partners, collaborators, and institutions that the Leland team should interview as potential fast-track pilot projects (see Annex F for summaries of USAID/Mali Meetings). The identification process used six basic criteria to measure an institution's readiness for effective Internet use:

1. *Institutional information and communication strategy:* this indicator is based on the institution's ability to understand and communicate to itself and to an outside audience its mission and main objectives.
2. *An institution's information use:* this indicator reflects the importance an institution places on generating information and using information to accomplish its goals and make decisions.
3. *Recognize potential contribution of Internet to institutional mission:* this indicator is intended to demonstrate if the institution recognizes the need for and potential use of information from outside its usual resources.

4. *Champion*: this indicator is intended to identify an individual to serve as catalyst/enthusiast for Internet use.
5. *Telecommunication and computer infrastructure*: this indicator identifies an institution's need to upgrade and/or purchase equipment to use this new technology.
6. *Potential for sustainability*: this indicator is intended to anticipate the Internet becoming a standard tool within the institution, being maintained and sustained in the operational budget.

By incorporating these six basic criteria (see Annex A for a complete explanation of indicators) into a survey tool, 43 USAID/Mali partners, collaborators, and other institutions were interviewed in ten working days. (See Annex B for interview summaries and Annex D for survey tools). The assessment concluded with a presentation on the findings and an Internet demonstration to USAID/Mali and partners.

3.0.2 Assessment Findings

Institutions were ranked according to their readiness for effective Internet use. (See Annex C for assessment matrices.) The matrix titled "Organizations" reveals most institutions (61 percent) interviewed were aware of the advantages of e-mail use as a communication tool and were committed to efficient development information management systems. There was an overwhelming desire for Internet training of all Internet applications. The two primary constraints holding these institutions back from using e-mail are the lack of financial capital and the limited number of individuals within the organization that can maintain the technology.

3. 1 Fast-Track Organizations

Of the 43 institutions interviewed, six institutions are cited as potential fast-track organizations. Working with these institutions would result in the greatest end-user impact, with highest results. (See Annex B for interview summaries.) The reason is that these organizations are aware of the Internet and its potential uses, they desire staff training, and they have an institutional information and communication strategy in place, which the Internet can support. The potential fast track organizations include:

- L'Ecole National Supérieur
- Le Comité de Coordination des Actions des ONGs au Mali
- Le Mission de Decentralization
- Le Cellule de Planification et de la Statistique
- L'Institut d'Economie Rural
- The West Africa Enterprise Network

ENSUP, already a targeted project for USAID/Mali's Special Objective for Information and Communication, would not only strengthen the University system by providing access to worldwide research resources and international communications but would also provide a resource center for alumni. ENSUP would be an example of academic Internet use for other

higher education facilities nation-wide.

The Internet would be instrumental in achieving the goals of CCA ONG, already dedicated to the capacity-building of Malian NGOs, which supports USAID/Mali's good governance strategic objective. They provide resources to their members (soon to include e-mail connectivity) which will contribute to their objective to build a strong information and communication component into their activities. They already have electronic information banks in place, and hope to use the Internet to increase their membership and to improve Malian NGO ability to participate in development decision-making.

The Director of the Mission de Decentralization would like to use the Internet to help facilitate the decentralization efforts from Bamako to the regional level. This decentralization goal supports the missions' vision of using the Internet as a tool to develop a national strategy of decentralization. It is important for the Government not only to develop a friendly Internet policy environment but also be a technology user - to properly guide legislation in this field and to develop a dependence for information technologies.

The Cellule in the Ministry of Health has already started developing a national communication strategy to relay their data from rural sites to Bamako for collection and analysis. Under USAID/Mali's youth objective, the health sector staff and the Ministry of Health would provide a model for collaboration for research and development purposes. The statistics gathered would be a valuable resource to health researchers and practitioners world-wide.

Institut d'Economie Rural is the main agricultural research structure in Mali governed by the Minister of Rural Development and Environment. Its mandate throughout Mali is to develop and implement agricultural research programs, disseminate research results, and provide technical assistance to farmers, a program that supports the development information component of USAID/Mali's SO2: to increase incomes in areas of high productive potential. IER already communicates with its six regional offices by e-mail.

The West African Enterprise Network is an organization that is involved with regional trade (i.e., high volumes of export of rice, onion, beans, millet, corn, and meat) in 11 African countries. The Network plays a role of promoting regional trade for Malian products. USAID/Mali SO2 team already work in other capacity with many of the Network members.

3.2 Next Steps

This assessment revealed that Internet assistance varied from player to player (i.e., USAID/Mali, fast-track organizations, other organizations, the ISP industry, donors, and private voluntary organizations). Therefore, recommended action steps were created to target these needs. This section includes a Next Steps Matrix citing the action steps recommended, the USAID person or persons responsible to implement the step, and an approximate implementation time frame.

3.2.1 USAID/Mali Staff and Fast-Track Institutions

USAID/Mali is one of over forty USAID missions with a Very Small Aperture Terminal (VSAT). VSATs were originally installed in USAID missions to provide connectivity to USAID/Washington as required for implementation of USAID's New Management System applications; however, a VSAT can also be used to provide direct, full Internet connectivity to the USAID mission staff.

If USAID/Mali is to effectively promote Internet use for sustainable development in Mali, then the mission (as a whole) must first become more Internet literate and demonstrate to its development partners what the Internet can contribute to an institution's information and communication strategy. It is recommended that the mission staff learn basic Internet applications such as Listservs, Telnet, Gopher, and World Wide Web. It is further recommended that each SO team prepare a SO specific action plan to integrate, with partner organizations, the Internet as an information and communication tool to reach sustainable development goals.

The six fast-track organizations require that USAID invest resources into their organizations so that they may effectively utilize and promote Internet use in Mali. They were selected for their high degree of Internet awareness, their ability to produce immediate results, and their potential to successfully demonstrate to other partners the value of the Internet.

Recommended action steps include:

Step 1: USAID/Mali host a staff-wide and fast-track organizations training workshop. (See Annex E: *Internet for Development: Applications and Training Workshop*.) The curriculum would be tailored to meet the various proficiency levels and language needs of Internet use and relevant application.

Step 2: USAID/Mali and fast-track organizations develop specific development information and communication action plans.

Step 3: USAID/Mali initiate an Internet user group comprised of fast-track partners and other organizations, focusing on development applications of the Internet (this group could become a subgroup of the Mali Chapter of the Internet Society). This advocacy group would support development information needs and continue to explore and implement urban and rural information and communication strategies.

Step 4: USAID/Mali make available the Information and Resource Center (IRC) as a facility to share Internet and development experiences for fast-track organizations and other partners.

3.2.2 Other Development Institutions

The remaining USAID/Mali partners interviewed scored low on their institution's information awareness and technology advancements assessment. These organizations demonstrated that they need more support than what USAID/Mali can provide. However, their needs reflect the needs of most Malian institutions (i.e., lack of computers, reporting system not yet computerized, etc.) and a strategy should therefore be developed to assist these organizations.

At USAID/Mali's discretion, organizations not interviewed during the Leland SO3 assessment should also participate in this strategy, when possible. Listed below are some guidelines for action:

Step 1: For those institutions that are aware of the Internet's capabilities and are looking to integrate them, attendance at seminars hosted by the USAID's fast-track institutions' user group should be encouraged. Suggested discussion topics include Internet use for development purposes, topical search strategies, an introduction to hardware requirements, and a list of technical constraints to Internet use in Mali.

Step 2: It is recommended that USAID/Mali's Information Resources Center be made available to those interested institutions that lack access to and/or experience with the Internet. Sector-specific demonstrations could be conducted, when USAID staff time allows.

Step 3: For those development institutions unaware of the potential of the Internet, the fast-track institution user group should host awareness sessions, with general information on Internet connectivity and the advantages of Internet use for development.

3.2.3 Internet Service Provider Industry

It is important for the Initiative to support an open business environment to cultivate a healthy and competitive Internet Service Provider industry that will contribute to meeting end-user demands. For example, the mission could begin by circulating the essence of the Memorandum of Understanding to potential ISPs which may discourage the Government from monopolizing the ISP industry. More specifically, to encourage a competitive ISP industry in Mali it is recommended that USAID/Mali take the following steps:

Step 1: It is recommended that USAID/Mali and the Leland Initiative provide technical assistance and support to potential ISPs (collectively), to encourage a competitive market.

Step 2: USAID/Mali encourage a Mali Chapter of the Internet Society. Members will ensure that the MOU is followed and encourage Internet use. This will also provide a forum to address Internet needs and constraints.

Step 3: It is recommended that USAID/Mali and the Leland Initiative increase technical assistance and training provided to the potential ISPs and to the appropriate telecommunication staff responsible for maintaining the node.

3.2.4 Donors

It is recommended that the Mission Director continue introducing and promoting Internet use in development activities among donors. The Leland Initiative provides an organizational framework for donors to coordinate their efforts, improve the local communication infrastructure, and promote relevant applications of Internet technologies for indigenous institutions.

It is also recommended that USAID/Mali work with the Canadians on building an Internet

training and technical assistance program in Mali. The Canadians expressed to the Leland Initiative SO3 team that they would like to provide French language Internet resources and training programs. It is recommended that donors develop an action plan based on this community's experiences and expertise in the area Information Technology.

3.2.5 Private Voluntary Organizations (PVOs)

Most of the PVOs interviewed have e-mail connection and use the connection to communicate with their home office in the United States. However, most of the PVOs lack resources and work with very poor, rural non-governmental organizations (NGOs) that can't afford to computerize their offices. Under these conditions Internet connectivity should be viewed as a long-range communication tool strategy. It is recommended that USAID/Mali encourage PVO partners to work at developing a communication and information management component with their NGO partners, and where possible, provide the hardware and encourage computer use to track inventory and prepare reports. Computer literacy is an important skill to develop before an organization is ready to use the Internet.

In cases where Internet applications are not appropriate, other fora for information exchange should be explored, such as information communication conferences, site visits, and postal service. Information exchange will enable institutions to share ideas and lessons learned, allowing them to work more effectively. It is recommended that USAID/Mali address PVO information strategies in the *Internet for Development: Applications and Training Workshop*, as SO teams discuss how to integrate an information component in partners' activities.

4.0 Conclusion

The fast track institutions identified through the Leland Initiative SO3 assessment process are USAID/Mali's partners. Because of their understanding of the value of information and the networks in which they participate, these institutions are ideal models for other development institutions looking to become more effective through the use of information and technology. With little investment from USAID/Mali, these fast tracks will demonstrate and facilitate the effective and relevant use of the Internet to development organizations throughout Mali.

With the help of the Leland Initiative, USAID/Mali can also promote the Internet industry, thereby improving services and reducing costs to the client. By working and coordinating with donors in all of these Internet activities, USAID can become that much more effective in promoting Internet technologies and development information.

NEXT STEPS MATRIX

	Action Steps	Responsible Party	Time Frame
USAID/Mali & Fast Track Organizations	1. attend a training workshop 2. create action plans 3. create an Internet user group for development information; encourage continued Internet use 4. use the IRC for Internet related activities	InfoComm/Leland SO3 team SO team members SO Leland teams & USAID/Mali InfoComm team	before June 1997 before June 1997 on-going once created on-going
Other Development Institutions	1. attend seminars to learn about what is needed for connectivity 2. use the IRC 3. attend awareness campaigns	Fast Track organization reps & Internet User group reps InfoComm/IRC staff Fast Track organizations	before June 1997 ongoing from June 1997 ongoing from June 1997
ISP Industry	1. use continued Leland SO1/SO2 support 2. establish Mali Chapter of the Internet Society 3. respond to TA for ISPs	USAID/Mali & Leland/W USAID/Mali Leland/W	as needed through the end of the Initiative July 1997 as needed through the end of the Initiative
Donors	1. continue to introduce & promote collaborative Internet efforts 2. work with Canadian's telecomm programs	Mission Director InfoComm & other USAID/Mali	continuous continuous
PVOs	1. develop information strategies in all activities 2. incorporate Internet applications when appropriate	USAID/Mali USAID/Mali	June 1997 July 1997

Annex B

Interview Summaries

This annex is an alphabetical listing of the interviews conducted during the Leland Initiative's End-User Assessment, September 13-29, 1996. Contained you'll find summaries of the findings for each institution, and points pertinent to Internet connectivity.

(Exchange rate: US \$1 = 500 CFA)

AFRICARE/Mali

tel: 223.22.02.90

fax: 223.22.02.90

Bamako, Mali

Interview date: September 23, 1996

Interviewee: McKinley Posley, Country Director

Overview:

AFRICARE, a NGO, began work in Mali in 1974. AFRICARE/Mali's main activities focuses on the population, health, economics, hydraulics, and research fields. Their work is primarily centered in rural areas with a greater concentration in the north part of the country.

Interesting Points:

- Mr. Posely purchased six 486 computers for local partnering NGO's to assist them by automating their financial and inventory, and reporting system. He installs the computers himself and trains them on how to maintain the equipment. The transformation is very slow. The project Directors, at the local NGOs prefer working with pencils and paper and only use their pc when encouraged to do so by Posley. In one project activity, he helped the artisans find a market for their goods in London by calling around England for buyers. In the end a \$100,000 deal was made. He knows that with the WWW the artisans could have access to market information that would help them sell their products.

- His biggest concern is the region north of Mopti, due to the lack of any sizable development programs in the region. Posely has a USAID food for development proposal in that would bring communications to the people located on the north side of Lac Faguibine. At the present time these people are cut off from the rest of the country particularly in the rainy season when the only way to travel is by canoe. This area is plagued by ethnic conflict and he would like to have communications with AFRICARE's partners via satellite phone. He would like to install a satellite phone system on Lac Faguibine in Tinaicha for communications between the local NGOs and AFRICARE/Mali.

- AFRICARE keeps population statistics gathered by local NGOs in Mali. These statistics should be looked at and see if they should be posted on the Web.

Inventory:

- Two office pc's (486, 386 - DOS and Windows applications

Two modems: 28 800, 9600

- Six -project 486 pc's that are located at local NGO sites

- two telephone lines (in Bamako)

- generators

- surge protectors

APEP - Private Enterprise Promotion Agency

tel: 223.23.10.72
fax: 223.23.10.73
BP 912
Bamako, Mali
Interview date: September 24, 1996
Interviewee: Ousmane Sidibe, CEO

Overview:

APEP is a private company funded by the World Bank to assist private enterprises. APEP doesn't want to be an ISP but would like to provide TA to ISP's. Right now they provide TA in management areas: accounting, training, marketing, etc. APEP fees are paid by the contracting firm (25%) and the World Bank (75%). APEP employees 9 people: 5 TA and 4 support staff.

Interesting Points:

· APEP disseminates their reports by phone and fax. Sidibe believes that technical information is needed in the private sector on how to locate products "best prices" information. The Internet could facilitate this process.

· In his opinion the Internet can be used as an intermediary for marketing ones products. However, education for end users on how to use the Internet for marketing their products is essential. There is need for ISP's to know what exactly is the Internet (in his opinion most ISP's think only in terms of email use), know the advantages about using the internet, and provide technician that speak English. He feels that Mali needs at least 5 ISPs to maintain a competitive ISP pricing structure. Right now SOTELMA blocks competition. He believes that the US should work with Sotelma for 1-2 years to be sure that a free ISP market is established.

· He is interested in reading the MOU and being a member of a local Internet Society

BINTTA - Bureaucratique.. Informatique.. Nouvelles Technologies.. Telecommunications..

Audiovisuel

tel: 223.22.01.01/22.00.44
fax: 223.22.22.52
BP 5083
Bamako, Mali
Interview date: 25 September
Interviewee: Eric Stevance, Responsable MaliNet (email: stevance@malinet.ml)

Overview:

BINTTA -who's headquarters are in Paris- began in Bamako in 1992, and created MaliNet (a local version of the WWW available to Bintta clients) in 1994. They have 50 nodes (using UUCP, some in each region) and more than 500 users. Of their 15 employees, 4 work on MaliNet and do the training for email and software anticipating uploading it to the WWW as soon as Mali is connected. Bintta conducts training at nodes outside of Bamako for clients, as well as selling hardware and software, servicing equipment, and developing software and crating databases. Bintta has more than 80 shareholders in Bamako, and anticipates opening an office in Guinea very soon.

Interesting Points:

· Bintta currently uses store-and-forward email, X25 technology through SOTELMA.

· Bintta charges its institutional clients 150,000 CFA for installation, training, and software; a 50,000

CFA monthly fee, and 200 CFA per KB (sent and received). For individual accounts, the fees are 50,000 CFA; 7,500 CFA; and 200 CFA per KB, respectively. Their subscribers -mostly NGOs and donor organizations- use their email accounts primarily for business, and only 10 percent of the email traffic is within Bamako. Stevance provides a daily news service to his clients, forwarding world news, French news, and all news concerning Mali (extracted from Agence France Presse).

- Bintta provides connectivity from their facility in Bamako, charging 500 CFA per visit and 200 CFA per KB. Email accounts are free when using this service.
- Bintta does not currently do any marketing, as they are trying to keep their clients well-served. Soon, they will begin advertising on the radio, television, and written press. Stevance may also host an Internet seminar in November 1996, prompted by having met a lot of Africans at the Internet Society in Montreal earlier this year (where Stevance was a trainer for a French workshop).
- Stevance recommends that the Internet be introduced gradually, to avoid confusion and misuse. He says there should be as much information posted from Mali, as there is being used in Mali. Though there is presently a small market for these technologies, it will increase as the regional Internet capabilities increase.
- It took Bintta 9 months for a new line to be installed, costing 75,000 CFA for the installation, and a 5,000-10,000 monthly fee. However, their service from SOTELMA is inconsistent; once their service was disconnected because their telephone bill was sent to the wrong address.
- SOTELMA charges 2,000,000+ per month for X25 connectivity, depending on volume.
- Bintta has plans on using cellular service.
- Bintta uses UUCP, receiving approximately 20 phone calls per day (some from PPP accounts), because it is easy to secure. Soon they will begin using encryption software, though SOTELMA will probably object.
- InfoTel, a Canadian organization, may soon become involved in the Internet industry in West Africa. their relations with SOTELMA are good.
- To sell equipment, Bintta must double the price to make a profit, due to taxes and shipping costs. He charges 175,000 CFA for a 14,400 baud modem, and 230,000 CFA for a 28,800 baud modem (depending on the brand name). A Pentium costs approximately 1,500,000 CFA.

Inventory:

- 6 phone lines, though they don't use all of them yet
- 20 computers (486s and Pentiums); 2 laptops
- Mac, Windows 95, UNIX
- 5 multimedia computers
- One laser printer
- 5 modems: 28,800 baud
- LANs: Windows Working Group, AppleTalk, UNIX TCP/IP
- yes - generator

BINTTA - France

93, Avenue Aristide Briand

92120 Montrouge, France

tel: 33.1.41.17.41.71

fax: 33.1.47.35.21.05

Interview date: October 7, 1996

Interviewees: Bory Diallo, Responsable Departement Etudes et Developpement (bory@bintta.rio.net)
Ernest Neglokpe, Responsable Departement Statistiques

Overview:

Bintta was created in France in 1990 as GIRAFE -Gestion Informatique Relations Afrique et France Entreprises- to provide French companies with communications access to France. Bintta presently has 27 employees in Paris, and their operations focus on technical information analysis, telecommunications management and planning, and technology transfer. They do work with graphics work in France and Canada (as Netgraph, in Toronto), and in October 1996 will begin in Denver (as Intergraph). In African countries, Bintta works with all networking technologies, including LAN, WAN and Internet. In this way, they are able to keep abreast of new technologies and support their organization through their work in Europe and North America, and help their home countries through their work in Africa.

New projects:

- They aim to become a regional ISP in French West Africa.
- Their most recent project, still in the prospectus stage, is MirInet - Multimedia Interactif et Réseau Internet. Like ORSTOM and RIO, MirInet provides Internet access to Africa while waiting for individual African countries work through their constraints to connectivity. When available, Bintta will use the public service to become an ISP in each country.
- Bintta is also looking to begin at a partnership with AMEX.
- The Virtual Institute in the United States, part of The People Network (TPN), is looking to partner with Bintta to do training throughout Africa. Programs would include those for continuing education, new products, and a diploma program.
- Bintta is considering becoming involved with telecottages, cybercafes, and "cyber palabres".

Interesting Points:

- The French: Bory described France's equivalent to the Leland Initiative, through France Cable and Radio, and how they plan to connect African countries with the equivalent of T1 lines. However, they plan on working through the governments, and preserving the monopolies by keeping their prices so low so as to prevent the private sector from participating in delivering these services.
- Mali: Established in 1994, running in January 1995, with Eric Stevance heading their operation. They've created MaliNet (which they are now going to separate from Bintta), given technical assistance to SOTELMA, concerning their X25 connection, and established the LAN for CMDT (Malian Textile Direction). Bory will be spending some time in Mali after Bissau, demonstrating MaliNet, and getting a users "club" going. I asked him about the possibility of having it become the Mali Internet Society. He reacted positively, I say approach him soon about it, before it gets so autonomous that other ISPs don't feel that they've had a hand in creating it. He also speaks of "cyber palabres" and telecottages, as well as providing regional networks to businessman so they can communicate with Dakar and Abidjan in real time. I told him I would forward contact information on the Mali chapter of WAEN to him.

- Guinea: Next country to have a Bintta office, Stevance will be providing technical assistance to get it started. Bintta is providing TA to SOTELGUI, but hopes to become an ISP soon. They have already set up a LAN for the government; the Prime Minister, Sidia Toure, is very support of information technologies. Guinea may be ready for Leland, and the France Cable and Radio have plans to begin work there.
- Cote d'Ivoire: Bintta has also set up government LAN in the Cote d'Ivoire, and IBM is working there as well.
- Senegal: French Cable going into Senegal, Bintta will be providing technical assistance.
- Mauritania: Mauritania is ready for Internet connectivity. Bintta knows and hopes to collaborate with a hardware provider, Mauritania Informatique et Maintenance.
- UNDP sponsored a conference on the Internet in Guinea Bissau in September 1996. They have invited the Ministers of Communications, representatives for the SOTEL..s, research centers, universities, and one private sector institution from Guinea, Mali, Senegal, and Mauritania. Bintta is representing the private sector for Mali, and Bory is attending.
- Bory and Neglokpe were very candid about their activities and plans, and expressed interest in working with USAID and the Leland Initiative. They are interested potential partnerships between Leland and the African private sector.

Canadian Embassy

tel: 223.22.22.36

fax: 223.22.43.62

BP 198

Bamako, MALI

Interview date: September 20, 1996

Interviewee: Raymond Drouin, Premier Secetaire et Consul

Overview:

Mr. Drouin is new to the embassy in Mali, and hasn't been able to get an update from the Canadian Ministry of Foreign Affairs in terms of their commitment to telecommunications in Mali. Earlier this year, the Canadians made a commitment to provide Internet connectivity to francophone African countries, though have done little in terms of hardware or training since.

In Mali, the Canadians are working with the Ministry of Energy, to rework the electrical system in Bamako by April 1997. Cellular telephone service was introduced in Bamako late September 1996, and was popular given the saturation of phone lines in most areas of the city. The Canadians are funding an additional 3000 cellular connections, beyond the 5000 initially available to the public. Another thrust of the Canadian program is decentralization throughout the sectors of development.

As the Leland Initiative will be providing the national node for Mali, it was informally decided that the role of the Canadians, rather than duplicating efforts, would be to provide and encourage French content on the Internet, as well as training for technicians and end-users.

CARE Mali

tel: 223.22.22.62/22.91.37

fax: 223.22.75.32

email:

BP

Bamako, MALI

Interview date: September 25, 1996

Interviewees: Steve Wallace, Director

Dawn Wadlow, Program Officer

email: mali@care.org (also have an account through Bintta)

Overview:

CARE has been in Mali for 21 years, and in November 1996 will be re-evaluating their program through a Strategic Planning exercise. CARE considers itself the "executing member" for USAID and other donors, and also receives funding from the Norwegians, the Dutch, the English, and from CARE USA. Their projects are split by development sector, and are implemented primarily on the grassroots level in rural areas, rather than the policy level. They are currently working closely with USAID Democracy and Governance Strategic Objective. CARE is structured to deliver relief aid, if necessary. Branch CARE offices manage their own programs, and like many other organizations with offices throughout the country, they use radio as their primary method of communication.

Interesting Points:

- After introducing the Leland Initiative, I clarified our strategies for rural areas, and how it fits in to USAID's Special Objective for Information and Communication in Mali. I encouraged them to consult Dennis and/or Martine for applicable ideas during their Strategic Planning exercise.
- CARE communicates with their beneficiaries by word of mouth. They don't encourage information sharing or communication strategies among those beneficiaries, and rarely organize fora for exchange of ideas among Malian organizations.
- Mr. Wallace thought the real need for communication was in Bamako, among the donors, as telephone and word-of-mouth seemed to be the predominant methods of information transmission in that community.

Inventory:

- Four telephone lines, one designated for Internet connectivity
- 1 286; 2 386s; 12 486s; 7 laptops
- 7 multimedia PCs
- 6 laser printers
- one modem; 14,400 baud
- 7 CD-ROM readers
- no LAN
- 1 staff member for computer support

CCA ONG - Comite de Coordination des Actions des ONGs au Mali

tel: 223.22.21.12

fax: 223.22.23.59

BP 1721

Bamako, Mali

Interview date: September 24, 1996

Interviewee: Mamadou Sekou Toure (email: cca-ong@balanzan.gn.apc.org)

Overview:

CCA ONG is an organization that focuses on the institutional and financial development of Malian NGOs. Their permanent staff of 8 provides oversight and training to over 100 member NGOs (that

must pass a screening), throughout the 7 regions of Mali. Their funding sources are primarily international PVOs and bilateral donors, that commission CCA ONG to administer specific NGO-strengthening projects. This Comité provides a forum for Malian NGOs to share information and experiences, as well as to bring together those NGOs with international donors and other development organizations. CCA ONG also works with the government and international partners to revise policies to improve the working environment for non-governmental organizations.

Interesting Points:

- CCA ONG, with over 100 NGO members throughout Mali, is constantly seeking to improve its communications internally, as well as with its partner institutions and government affiliates.
- Mr. Toure currently uses the one email account at CCA ONG. This account is with Balanzan, and he plans to train other staff members how to use it, once it is reliable. He understands the potential of this method of communication, and is interested in disseminating African information.
- Like the vehicles in their motorpool, which are available to member NGOs upon request, Mr. Toure sees CCA ONG's email connectivity as a resource for members. As the Comité is also an information center at the disposal of its members, the Internet can play a key role in information retrieval and dissemination for them. Much of what Mr. Toure focuses on are the cross-regional comparisons and lessons useful for NGOs.
- With the Internet, Mr. Toure sees a lot of potential for expanding CCA ONG's current networks with both domestic and international organizations.

Inventory:

- Four telephone lines, one designated for their Internet connection
- More than 10 PCs, all 486s or Pentiums
- One CD-ROM reader
- Five laser printers
- One modem: 14,400 baud
- No LAN
- Outside contract for maintenance
- No surge protector

CEFIB- Centre d'Etudes et de Formation en Informatique et Bureautique

tel: 223.22.59.52

fax: 223.22.50.41

BP 2838

Bamako, MALI

Interview date: September 27, 1996

Interviewee: Coulibaly Madina Tall, Directrice Generale

Nene Traore, Directrice Adjointe

Overview:

CEFIB was created in 1987 by private finances. They currently have 1500 students taking computer science courses. They have 4 computer labs with approximately 40 386 pcs and 10 dot matrix printers. CEFIB tailor workshops for the businesses community and provide onsite training from any of their 20 instructors.

Interesting Points:

- CEFIB is interested in becoming an Internet training site in Bamako.
- They are looking to upgrade their equipment, purchase a server, and get hooked up on a LAN.
- They conduct computer seminars for local businesses

Cellule de Planification et de la Statistique -- Ministere de Sante

tel: 223.22.27.25

fax: 223.23.27.76

BP 232

Bamako, Mali

Interview date: September 24, 1996

Interviewees: Ousmane Sidibe

Mamadou Ballo

Salif Coulibaly

Jean Luc Duponchel

Overview:

The Cellule was established in April 1993, and receives all of its funding through the Malian Ministry of Health. Though the Cellule is comprised of 17 staff members, they collaborate with more than 60 of the Ministry's statisticians throughout Mali. With the information provided, they produce syntheses and analyses for high level Ministry officials, for their formulation of nation-wide health policies. The Cellule is responsible for Mali's Demographic Health Survey, as well as other studies upon request. Their connections to the donor and international health communities enable them to do comparative studies and use lessons learned from other regions. Their research is disseminated by the government, and their community-based studies are distributed and to be used throughout those areas examined. The Cellule also does advocacy work for health issues and training of statisticians throughout the country.

Interesting Points:

- The interviewees' primary frustration is the unreliability of the statistics they are to report with, thus making it difficult for them to fulfill their mandate. Though they understand the potential that email has for accurate and timely reporting, they fail to consider the investment in training, hardware and infrastructure required.
- The Cellule will be getting email connectivity very soon, and intend on having a server for their branch offices in the future.
- They currently have statistical databases for the data they collect for over 11,600 villages in Mali, and have recently hired a woman to enter data and train the staff on the software.
- The Cellule uses UNICEF's software for their local and regional LAN (not connected to the Ministry statisticians).
- For both information retrieval and dissemination, the Cellule is also considering communications strategies among the health organizations of the government. They are also planning a project to network West African hospitals.

Inventory:

- 2 telephone lines
- 3 386s, 10 486s (6 laptops), 1 Pentium

- 1 modem: 28,800
- 1 CD-ROM reader
- 4 laser printers
- LAN: Ethernet - 6 ports
- No persons for computer maintenance

Centre de Langues

tel: 223.22.20.64

BP 1583

Bamako, Mali

Interview date: September 27, 1996

Interviewee: Balla Konare, Directeur par Interum

Adama Barry, Teacher/Accountant

Halidou Maiga, Teacher

Nouhoun Ouloguem, Teacher

(email: centre de langue@balanzan.gn.apc.org)

Overview:

The Centre de Langues is the language training center in Bamako. Its students vary from college graduates seeking skills to high-level government officials and Ministers. Many of its students include employees of international development organizations seeking to refine and tailor their language skills. The Centre was originally part of the British Consul, but is now partially funded by the Government of Mali (salaries only, as the employees are federal workers), and otherwise dependent on student tuition payments. They have recently asked USAID for financial assistance, though none was available at the time. Financial constraints prohibit them from publishing newsletters and further promoting their services.

Though they use a traditional teaching format, they have various other language resources, including audio and video tapes, a library, and close affiliations to language clubs and the language departments in University. They tailor their curriculum to the needs of the students, and have included computer training programs in the past. They have also provided skills training to NGOs, upon request.

Interesting Points:

- Though they have an email account, their modem recently suffered a power surge. They are familiar with the potential of Internet connectivity, but have never seen the World Wide Web. After further discussion, they were not only interested in the communication possibilities of the Internet, but information retrieval and its furthering their ability to cater to the needs of their students and developing their curriculum.

- Balanzan has not provided training or orientation to the email software or service. However, the cost is manageable, and the Centre has relations with the British who often provide assistance and explanation.

Inventory:

- One telephone line
- Two very old PCs
- One laser printer
- 1 modem (broken)
- No multimedia PCs

- No LAN
- No staff for computer support
- No surge protector

**CERDES - Centre d'Etudes et de Recherche pour la Democratie et le Developpement
Economique et Social**

tel/fax: 223.22.82.83

BP E 160

Bamako, MALI

Interview date: September 20, 1996

Interviewee: Oumar Makalou, President

Overview:

CERDES was founded in October 1991, and is committed to the promotion of democracy in Mali, while upholding Malian cultural values and traditions. They work towards a better democratic process, in the Malian government and with Malian institutions. They provide fora for the research and debate of democracy and development.

CERDES is a non-profit organization, funded through memberships, donations, and the sale of publications and services. The only full-time staff member is the secretary, the officers and members are chosen for their expertise and reputation, and work on projects as requested and paid for that work only. Their work is primarily in the sectors of education, economic development/commerce, agriculture, and politics. Their clients include the National Endowment for Democracy (NED), UNDP, UNESCO, the African Leadership Forum, the World Bank, The Global Coalition for Africa, the Malian Chamber of Commerce, and many bilateral aid programs (including USAID). Recently, they have been commissioned to do several studies, to broadcast civic education programs on local radio stations, and to create tailored databases for the Malian Ministry of Rural Development, UNDP, and USAID.

Interesting Points:

- Dr. Makalou had never used Internet technologies of any kind, and was therefore not familiar with the resource, or the capabilities of his fellow CERDDES members. He and his secretary attended our demonstration at USAID, and appeared very enthusiastic.
- Given the nature of the CERDDES' research, their members have the networks and the knowledge-base to be effective. However, the Internet would not only facilitate their communication, but allow for broader analysis and more cooperative work.

Inventory:

- 1 telephone line
- 1 386, 1 486: DOS, Excel, WordPerfect, Lotus
- No multimedia PCs
- 1 laser printer
- 2 modems, but do not use
- no LAN
- contract for computer maintenance
- yes - generator

CERPOD - Centre d'Etudes et de Recherche sur la Population pour le Developpement

tel: 223.22.30.43

fax: 223.22.78.31

BP 1530

Bamako, Mali

Interview date: September 25, 1996

Interviewee: Dr. Moussa Dolo, Chef de Service, Service d'Appui Technique
(mdolo@cerpod.insah.ml)

Overview:

CERPOD was established in 1988 by CILSS (Permanent Interstate Committee for Drought Control in the Sahel), and placed under the umbrella of the Sahel Institute (INSAH).

With their headquarters in Bamako, CERPOD sends teams to work in eight other Sahelian countries, including Burkina Faso, Cape Verde, Gambia, Guinea Bissau, Mauritania, Niger, Senegal, and Chad. They also provide technical assistance to the Gambia, Rwanda, and Cape Verde. CERPOD's activities are funded by UNFPA, UNICEF, the Ford Foundation, the Rockefeller Foundation, the World Bank, IDRC, and many bilateral donors, including USAID.

CERPOD's mission is to "enhance the scientific and technical potential of Sahelian research institutions" in the area of population, broadly defined to include food issues, ecology, demography, economic sustainability, migration, urbanization studies, maternal and child health care, AIDS, family life, health and society, and health and environment. Through their research, technical assistance, information dissemination, and training, they aim to "inform and help decision makers better understand the inter-relationships between population and development operations". They provide support to health policies and programs, organize national and regional seminars and workshops, provide training, develop education programs on population issues, and assemble baseline data. CERPOD's technical assistance also includes developing appropriate softwares, creating scientific and technical databases, processing survey data, and providing advice and design of government and organizational activities. CERPOD works with the Ministries of Plan, Health and Agriculture in each of the countries where it does research.

In building awareness, they publish magazines and bulletins, conference summaries, promotional brochures, working papers, and regional studies -- all relating to population and development issues. In their headquarters, CERPOD has an impressive documentation center focusing on regional information, though also with CD-ROM capabilities that include Popline, and agronomic and tropical data (among others). They also facilitate a network of journalists interested in health and population issues, and through their projects often use the media (both radio and written) to promote these issues. Though they have strong information dissemination strategies, they still consider their personal networks their most valuable ones.

Interesting Points:

- The Mellon Foundation has funded CERPOD's email connection. They use Bintta, and pay a 50,000 CFA flat rate per month, then average 200,000 CFA/month connect-time, which they charge to their projects based on use. They have their own subdomain for a monthly fee of 50,000 CFA - cerpod.insah.ml.

- Mr. Dolo recognizes that the Internet will help CERPOD more easily communicate with their teams within the Sahel (though they are not yet connected), and are already using it with their international partners. There are very few organizations in Bamako with which they work who are also connected. He also recognizes the potential of the World Wide Web for CERPOD's research.

- Mr. Dolo is interested in HTML training, as they have many bilingual publications to post in the Internet.

- Mr. Dolo was familiar with listservs though had never subscribed, and did not know of any relevant to CERPOD's activities. I asked Jim Esselman to send him a listing with instructions.

Inventory:

- 3 telephone lines (1 for fax, 1 for email)
- 5 286s; 6 386s; 13 486s; 6 Pentiums; 16 laptops
- 2 multimedia PCs
- 12 laser printers
- 1 modem: 14,400 baud
- 8 CD-ROM readers
- installing LAN, more than 20 users
- 2 people on staff for computer maintenance
- yes - generator

DNA COOP - Direction National de l'Action Cooperative

tel: 223.53.85/22.61.93

BP 86

Bamako, Mali

Interview date: September 24, 1996

Interviewees: Maciga Diawara, Directeur National

Boukadry Dembele, Directeur Adjoint

Overview:

DNA COOP was established in April 1990, and is federally funded. It employs over 600 people, working in all sectors, in neighborhoods all over Mali. Their goal is to provide assistance and training to Malians who want to form cooperatives. They help develop projects, and solicit donor funding.

They are currently remodeling their documentation center, which is available for public use, though this does not contain any electronic sources of information. The secretaries use the computers for word processing and spreadsheets only. Recent budget cuts have caused them to stop using radio broadcasting as a way of reaching the public, but they state that their most valuable sources of information are their interpersonal relations. They maintain an active working relationship with institutes and research centers within Mali.

Interesting Points:

- Though invited to the Internet demonstration at USAID, they did not attend. It seems they may not be interested in these technologies at this time, given their large number of employees and their distribution throughout the country.

- DNA COOP is currently using radio to communicate with their employees outside of Bamako.

Inventory:

- 2 telephone lines
- 4 PCs
- 3 printers
- no LAN

- use outside contractor for computer maintenance
- no CD-ROM readers
- no generator

ENSUP - Ecole Normale Supérieure

tel: 223.22.21.89

tel/fax: 223.22.04.81

BP 241

Bamako, Mali

Interview date: September 25, 1996

Interviewees: Sekou Traore, Directeur General

Mr. Keita

Mr. Cisse

Mr. Maiga

Overview:

As part of the national tertiary education system, ENSUP has 10 academic departments, 200 staff, and over 2000 full-time students. They also have about 500 government employees enrolled in classes. Over the next several years, ENSUP and 7 other tertiary education facilities are to be joined on a common university campus, with the aim of enhancing collaboration among the schools, benefiting their staff and students.

Currently, ENSUP's researchers are sponsored in large part by the donor community. Though much of their research takes the form of fieldwork, ENSUP's library fulfills most of the needs of its users. There, they use UNESCO cataloging software to inventory their collection, two televisions as teaching supplements, and a collection of all of the students' theses. However, they lack up-to-date technical journals and current events. They are also interested in electronic sources of information, both internal databases and Internet connectivity.

Interesting Points:

- ENSUP has already been identified by USAID's InfoComm team to be a pilot project, and will be receiving some hardware. As they are aware of this, they are waiting for USAID's assistance, and do not yet have email connectivity. There are several members of the staff who are familiar with these technologies, though no one has thought out how to best implement networking (a LAN) and Internet connectivity within ENSUP. In our meeting, we began discussing the need for a plan and justification for hardware and assistance requested from USAID.
- Mr. Traore attended the Internet demonstration we gave at AID, and brought another professor from ENSUP. They are very interested in how these technologies will enhance their program.
- Much of the frustration I heard among the ENSUP staff I met was that the state hasn't supported new information technologies in Mali since 1984.
- ENSUP, however, has co-sponsored three "journées informatiques" to raise awareness and discuss information technologies. They have invited speakers from France and the Cote d'Ivoire, and this year relied on their experts in Mali. These fora are open to the public, and are well-attended.
- ENSUP provides computer training classes to the public, that are less expensive than those from private businesses. Lately, prices are going down in the private sector, and ENSUP doesn't have as many clients. This is useful, given the number of students and alumni who use ENSUP's computer

lab, open 24 hours, seven days a week.

Inventory:

- Two telephone lines
- 7 286s; 11 386s; 5 486s; 3 Pentiums; 2 laptops
- No multimedia PCs
- 2 laser printers
- No modems
- Novell LAN - 4 workstations connected
- Four staff members for training and trouble shooting
- Outside contract for maintenance
- Yes - surge protector

GERDDES - Groupe d'Etudes et de Recherches sur la Democratie et le Developpement Economique et Social

tel: 223.22.19.33

fax: 223.22.1932

BP E 2528

Bamako, Mali

Interview date: September 24, 1996

Interviewees: Mamadou Somake

Mohamed Traore

Overview:

In Mali, GERDDES is more of an association of persons interested in promoting democracy, as all of its members donate time and resources pro bono, and it has no physical office space. Their role in Mali's democratic process is an important one, as they are able to organize seminars and fora to discuss issues that the government and other organizations have not addressed. Its members include researchers, journalists, and professors, who collaborate closely with other NGOs and civil society organizations that focus on democracy issues. They often work with the National Democratic Institute (US) on specific projects, and are need of start-up money to establish themselves as an institution.

Interesting Points:

- All chapters of GERDDES -32 countries throughout Africa, and in the United States, Canada and France- communicate through a fax network.
- GERDDES' strength comes from the members' interpersonal networks.
- In Mali, GERDDES uses radio and television broadcasts to advertise their events, courtesy of their members resources.

Inventory:

none

Institut d'Economie Rurale

tel: (223)23.29.05

fax: (223)22.37.75

B.P. 258

Bamako, Mali

Interview date: September 27, 1996

Interviewees: Oumar Doucoure, (email: doucoure@ier-dir.ier.ml)

Tim Schilling, (email: schillin@ier-bamako.ier.ml)

Overview:

IER is the main agricultural research structure in Mali. It's mandate is to develop and implement agricultural research programs, disseminate the results of that research, provide agricultural development TA, and develop appropriate technologies improve to farmer productivity. IER is "an economically autonomous public corporate body having an administrative mandate", and is overseen by the Minister of Rural Development and Environment through IER's Governing Board (which is empowered to act on behalf of IER).

IER has a documentation center open to the public, but primarily used by their researchers. It contains a database for their 139 research projects (fields include site title, strategic plan, methodology, results experience, objectives, donors, dates, and contact person). CD-ROMs are also available, and are frequently lent to the staff in the field. Doucoure and Schilling expressed a need for training for their staff when full Internet capabilities reach Bamako, and a current need to know about outside resources and existing documentation in their field.

Interesting Points:

- IER accounts for 1/3 of Bintta's business, and is the only email user with regular communication inside Mali to their 6 offices in Sotuba, Sikasso, Niono, Mopti, Kayes, and Gao. Most of the modems up-country range from 1200 to 4800 baud. They average costs of 1-2 million CFA per month in fees to Bintta. Their connection is slow, and they've found listservs to be too expensive.
- Doucoure attended the Internet Society conference in Montreal, and stressed the need for an African Internet Society.

Inventory: (in Bamako)

- 8 PCs: mostly 486s
- 8 modems: 14,400 baud
- at least 1 CD-ROM reader

Institut Microlab sarl, Centre d'Informatique Appliquee

tel/fax: 223.22.05.42

rue 604 x 435, Hippodrome

BP 3146

Bamako, Mali

Interview date: September 24, 1996

Interviewee: Seydou Sanou, Directeur General

Overview:

The company started with personal financing in July 1991. He employees 12 people: a few of the positions include 2 programmers, 1 electrician and one engineer and 4 computer repair men.

His primary mission is to provide service and hardware at a cheaper price than what has been previously been available in the country. His objective is to provide competitive prices so that not only the wealthy but also the medium and lower classes can afford to purchase computers and receive training. In 1992 he started a one and two year training school. He had to stop because student strikes made it an unprofitable venture. He wrote curriculum for Cefib, but he no longer works with them.

Interesting Points:

·At his company, he conducts training seminars, writes programs and maintains pc's. For example, he approached a series of pharmacies located in 5 different towns and wrote a program to track inventory. He would like to do the same thing for grocery stores and clinics.

·clients: 20 big businesses, he has trained @200 people in his seminars since 1991 (he charges 35,000CFA for a one month: 18-24 hours seminar).

·He said that local ISPs need technical expertise and be English speakers.

Inventory:

·He has 2 phone lines, he is waiting for 2 more lines but Bamako is saturated.

·Uses a Novell server.

Mali Volunteer Corps

c/o USAID/Bamako

Bamako, Mali

Interview date: September 25, 1996

Interviewee: Mahamane Baby, Member

Overview:

The Mali Volunteer Corps (MVC) is a NGO developed from the Ministry of Labor that was founded in 1994 by funds (\$1.7 million) from UNDP which will cover the volunteers stipend while working as a volunteer. At this point in time there is not a paid staff nor office space. The mission of MVC is to contribute to the social, economic and cultural development of Mali. The primary activity is to assist the youth with their first work experience.

Interesting Point:

·He sees the potential of Internet to help the youth remain in their villages and thus assisting in stopping urban migration. This could happen by placing a pc with an Internet connection in a Maison de Jeune where the youth have access to external information via the Internet to help establish rural businesses.

Mission de Decentralisation

tel: 223.23.06.80

fax: 223.23.07.00

BP E 1420

Bamako, MALI

Interview date: September 26, 1996

Interviewee: Ousmane Sy, Chef (email: osy@malinet.ml)

Overview:

The Mission de Decentralisation, founded in January 1993, reflects the Malian government's commitment to decentralizing government functions to the commune level in Mali. The Mission, charged with this mandate, is funded by the Malian government and reports directly to the Prime Minister. Policy change and noticeable government reform are anticipated results of the findings of the Mission.

Much of what the Mission examines are the information structures in place between Bamako and the

government offices all over Mali. One of their goals is to improve the circulation of information; the Ministries of Health, Basic Education, and Finance currently lead the way. Mr. Sy's staff of 12 possess a variety of expertise, enabling them to work effectively in all sectors. The Mission uses radio and television broadcasts to disseminate their message and advertise their events to the public.

Mr. Sy recognizes that the quality and availability of information now is poor throughout Mali. Along with the documentation center that is in the making, Bintta will be creating a database for the Mission in CD-ROM so they can collect information from all of the communes (this includes data on economics, politics, roads, health care, and population). In an effort to preserve this process of decentralizing, the Mission also collects sound and video clips of debates and meetings in villages.

Interesting Points:

- Mr. Sy has already discussed Bintta's creating a website for the Mission de Decentralisation. He is a strong advocate for Internet technologies, and asked for information about listservs relevant to the Mission's interests.
- Mr. Sy is the only one using email in the Mission, though most of his email correspondence is outside of Mali, as few of his colleagues within Mali have Internet accounts.
- Though the 50,000 CFA month fee, plus online time is expensive, it's worthwhile, according to Mr. Sy.

Inventory:

- 3 telephone lines (one designated for fax)
- 15 PCs, mostly 486s
- 2 multimedia PCs
- 5 laser printers
- 1 modem: 14,400 baud
- Bintta services their Macs, another outside contractor to service other machines
- yes - generator

Musée National

tel: 223.22.34.86

fax: 223.23.19.09

BP 159

Bamako, MALI

Interview date: September 20, 1996

Interviewee: Samuel Sidibé, Director

Overview:

Because of Mr. Sidibe's insight, Mali's national museum is playing an important role in preserving Malian culture and teaching Malians the value of the diversity of their heritage. Through television and functions held at the museum, he encourages Malians to learn and become involved in their arts. He and his staff (of over 50) also travel throughout the country teaching to prevent the selling and loss of national treasures.

Mr. Sidibe is active in the international art world, and publishes magazines promoting his collections for conferences and seminars.

Interesting Points:

- Mr. Sidibe is well versed in the potential of the Internet for museum purposes. He is already well-networked world-wide, and hopes to use email to reduce his fax bill. In addition, he understands the value of information sharing, not only to exhibit artworks over the Internet, but in cases of theft and antique trafficking. He is aware of the potential copyright problems associated with exhibiting on the Internet, but is anxious to be able to participate more easily in this world-wide network of museums.

- He is working with both the French and the Dutch to put more than 36,000 photos on to CD-ROMs for preservation. They are also looking at preserving other parts of the museum's collection, including video tapes of traditional dances and music festivals.

- He is concerned about getting full connectivity to Mali, and having the service at reasonable rates.

Inventory:

- Moving over to Macs
- 5 386s
- The museum will be receiving new equipment from the French and the Dutch, for this new CD-ROM project

National Cooperative Business Center (NCBA)/ Ligue des Cooperatives des Etas-Unis (CLUSA)

Project CLUSA s/c OHVN

tel: 223.22.40.64

fax:: 223.22.34.10

BP 178

Bamako, Mali

Interview date: September 26, 1996

Interviewee: Curtiss Reed, Jr., Program Representative, Mali

Overview:

NCBA entered Africa in 1956 with its primary mission to provide management training to village based businesses (cooperatives and associations) in all sectors: health, transportation, agriculture.

NCBA/CLUSA is an USAID/Bamako funded project (scheduled to end phase two in October) titled Developpement de la Haute Vallee (DHV-amende) - programme d'appui aux associations villageoises. DHV-amende works with 122 associations and 100 groups. Presently it has 40 management trainers that have started 4 organization. These organization provide consulting and training to rural business people to encourage the establishment of information linkages among themselves. NCBA has plans to set up a database of African consultants.

Interesting Points:

- Reed said there is a need to identify a commercial resource base.

- He also perceives a need to have policy legislation (in some cases translated) put on the Web to assist small enterprises (he sees this happening in the next 5 years).

- Trade Point is a good example of information transparency. Trade Point will get the producers a larger slice of the financial pie and will help demystify information resources.

- The Internet will empower NCBA clients by stimulating their thinking about outside markets.

·NCBA/Mali uses MaliNet using a Mac platform.

ORSTOM - Institut Francais de Recherche Scientifique pour le Developpement en Cooperation

tel: 223.22.27.74/22.43.05

fax: 22.75.88

BP 2528

Bamako, Mali

Interview date: September 27, 1996

Interviewee: Mamadou Diamoutani (email: diamouta@orstom.ml)

Overview:

ORSTOM is a French research institution, with its own telecommunications support function. As the country is not well connected, ORSTOM provides email connectivity other research and development institutions at a minimal fee (10,000 CFA per month). They will terminate this service once the Mali has a sufficient number of Internet Service Providers to support the demand.

Technicians are sent to Paris several times a year for training in the latest computer and Internet technologies. They, in turn, provide software training to ORSTOM staff.

Interesting Points:

· My meeting with Diamoutani was the morning after ORSTOM organized an Internet exposition, funded by UNDP. It was well attended, and the audience included 5 government ministers.

Diamoutani blames the press for inaccurate reporting, giving the Malian public the impression that they now had full Web access. In reality, they were showing that there are Web pages about Mali on the Internet. ORSTOM used PPP through their home at Montpellier, and the UN server in New York to retrieve these Web pages that they created (mostly on tourism) for the demonstration. The UN contact person in Bamako for this event is Mme Boukanem (sp?), who is with the Program for the Private Sector Promotion.

· This is ORSTOM's fourth exposition this year. The first was in January with two Senegalese consultants brought to introduce email, electronic fora, listservs, and html. It was by invitation only -- they invited several of their subscribers and SOTELMA. The second forum was a day and a half in February, where local presenters demonstrated their Web pages (on Malinet). In May, ORSTOM held a multi-media conference, and a discussion of Internet potential in Mali. The latest was that described above.

· ORSTOM's email service costs 10,000 CFA per month, as well as a charge for the amount of traffic. Their initial sign-up fee of 200,000 CFA includes training for up to 6 users. ORSTOM and its clients use email primarily for international correspondence. ORSTOM uses SOTELMA's Malipac (X25 transmission).

· Because of its status as a research institution, ORSTOM imports equipment tax-free.

Inventory:

- 3 telephone lines
- 30 PCs, 2 laptops
- UUCP, UNIX
- Internet software: Netscape, Mosiac, Java.
- 5 multimedia PCs
- 6 laser printers

- 4 modems: 2-28,800 baud, 2-14,400 baud
- 6 CD-ROM players
- All PCs on a LAN
- 2 technicians for maintenance/training
- yes - generator

PRED - Policy Reform for Economic Development

tel: 223.22.09.01

fax: 223.22.63.04

c/o USAID

BP 34

Bamako, Mali

Interview date: September 24, 1996

Interviewee: Aboubabcar Diabate

Overview:

Diabate was familiar with some Internet technologies, and retrieving documents, though has relied primarily on fax networks for communication. At first, he didn't understand the relevance of the Leland Initiative and the World Wide Web for Mali. And, he noted that the current costs were prohibitive. He has not yet returned his survey.

PROTON

tel/fax: 223.23.08.30

BP 904

Bamako, Mali

Interview date: September 26, 1996

Interviewee: Abdoul Wahab Diakite, Directeur

Overview:

PROTON was established in 1995, and now has 3 permanent employees, 2 technicians, and one consultant (upon need). Thus far, they have secured contracts with Energie Mali, SOTELMA, and the army. They work on devising and improving systems in energy, telecommunications, electronics, informatics, and telematics.

In spite of their limited budget, PROTON is continually doing market research, and has a personable and effective way of marketing their services. Diakite was clear in requesting training, not funding, when we spoke of the Leland Initiative.

Diakite also informed me about the way the telecottages operate in bamako. They are often open 24 hours, and charge per page and per minute to transmit a fax, and 500 CFA per page to receive a fax. He also informed me that he did not find the Chamber of Commerce to be a useful resource for his business..

Interesting Point:

· Though telecommunications is part of PROTON's scope, they are finding the equipment is too expensive. Diakite asked about reconditioned hardware, and told me there's a huge market for it in Africa. He is looking for a niche in this sector.

Inventory:

- 1 telephone line
- 1 PC: 486
- no laser printer
- no modem
- no generator

SITA - Societe Internationale des Telecommunications Aeronautiques

<http://www.sita.int./sita/>

tel: 223.22.47.15

fax: 223.22.76.91

BP 177

Bamako, MALI

Interview date: September 24, 1996

Interviewee: Diango Yacouba Diakite, Centre Manager

Overview:

Founded in 1949, SITA is "the world's largest private international data communication network", servicing 550 airlines and air transport related organizations. Membership is open to any organization whose primary business is related to the air transport industry.

In Mali, SITA services more than its members, providing full Internet connectivity to international organizations including: the FAO, UNHCR, DHL, GTZ, and the World Health Organization. The UN has requested email connections in Gao, Kayes, Segou, Koulikoro, and Timbuktu. SITA currently services 20 organizations in Bamako; they do not yet service individuals. They rely on their headquarters (in Paris) to handle fees and billing. SITA provides training to subscribers, and maintenance (if the client chooses to contract of that service). Though they don't usually supply hardware, they can order it upon request.

The SITA office in Bamako is well equipped, with both hardware and software. Their 4 employees are engineers, all schooled outside of Mali, and giving training regularly (in Dakar, Abidjan, Paris, and the United States).

Interesting Points:

- SITA gets its connectivity through SOTELMA, and uses their X25 capability for the email service it provides to its client organizations in Bamako.
- Though SITA has good relations with SOTELMA, and Diakite was recently informed through a letter of SOTELMA's plans with the Leland Initiative, SOTELMA maintains control of the telecommunication industry in Mali. Though SITA does some contract work with communications infrastructure, SOTELMA does not hesitate to interfere when it feels SITA is on their territory.
- Diakite brought up the need for deregulation in the telecommunications sector several times, and in spite of my explaining the role of Leland's SO1, he still felt it to be an issue.
- SITA will increase their number of dial-up lines from 4 to 8 dial-up lines. They pay 90,000 for the installation of a line, the standard 85 CFA per minute, and a monthly fee per line.
- Lines to Gao, Timbuktu and Mopti are great (via satellite), but not so good to Kayes and Segou (via microwave).

Inventory:

- 12 telephone lines, will have a cable to the PTT with a 200 line capacity by the end of 1996
- 90 terminals
- 100+ printers
- 40+ modems
- 10+ CD ROMS
- 7 generators
- a LAN

SOMARC

The Futures Group: Services en Sante Communautaire et Population

tel/fax: 223.23.28.01

Niarela, rue 363 Villa 178

Bamako, Mali

Interview date: September 24, 1996

Interviewee: Rene Rovira, Chef du Projet

Overview:

SOMARCs main activities include distribution of social marketing products, information dissemination activities, training service providers, and product awareness research activities. They have 40 employees in Mali.

In his opinion, logistical coordination is a problem between SOMARC and its partners; and in general between donors and their PVO partners. If everyone (who can afford the technology) would use email as the way to communicate - activities would be coordinated more efficiently.

He would like to see the upcountry centers he works with hooked up to each other so that they can communicate among themselves to get products delivered to where the need is at any given point in time. Right now every 20 days SOMARC has reps sweep the centers to collect data. It can take up to 6 months to get the data back to Bamako this way which renders the material practically useless. He would like to begin automation with the umbrella organization: Groupe Pivot. The Coordinator, Mr Modibo Maiga could work with the NGOs to use electronic means of communications. Electronic communications would help get products moving and used before they expire.

Interesting Points:

· SOMARC reduced their telephone bill by 30% in one years time by relying on email to communicate and coordinate activities with their home office in the States.

· In his opinion, the Internet will be a valuable information tool in Mali. He feels that one needs to educate the populace. For example, when Bintta hooked up SOMARC with email, they didn't explain the full potential benefits of the Internet. Bintta did organize workshops and press conferences as marketing and public relations schemes but no end user information has been delivered in the workshops or conferences.

· He feels what is necessary is a country wide expo - get the info out to everyone. There is a need to get the management level of an organization to use electronic communications first then grassroots NGOs could follow in time. TA training is necessary since computers themselves are intimidating especially to individuals living upcountry. For example, he has a difficult time getting his employees located in remote areas to use computers; they prefer to use pencil and paper.

Inventory:

·SOMARC uses BINTTA's telematic services. They paid 450,000CFA for the set up service fee and 50,000CFA/month in addition to 200CFA /byte for each incoming and outgoing email. Email is primarily used to communicate with home office in the States.

·3 PC: 486 with DOS for Windows
·one laser printer
·one 9600 modem.

Spider, sarl

tel. 22.23.02

Hippodrome

rue 224 Port no. 1238

Bamako, Mali

toolnet: 9:1223/1

email: edabdu@mli.toolnet.org

Interview date: September 25, 1996

Interviewee: Emmanuel Dabou, Directeur/Owner

Overview:

Mr. Dabou started the company in 1995. He received his funding from the Government of Holland (30%), and from private funds. He has 35 email clients from the business community, the NGO community, and the diplomatic community (Dutch embassy). He provides email services via Toolnet using DOS for windows. He recently opened an office in Ouagadougou, Burkina Faso which also provides email service. He said that his clients use his services for a variety of reasons. For example, in general NGO's use email to send reports to donor and in general the private sector uses email to communicate with their clients.

Toolnet prices: 60,000 registration fee - annual subscription fee: individuals: 60,000 organization less than 9: 75,000, for additional user up to 9: 20, 000 for each additional user, then additional user 10 or more: 10,000 and for each user send/receive fee: @200 /kilobyte.

In his opinion, the most useful Internet services in Mali will be: 1) the WWW to obtain marketing information for the business community; 2) listservs for students; 3) email for all businesses and NGOs.

Inventory:

·server Fidonet.

·2 multimedia computers

·2 telephone lines.

·He provides online backup and generators, surge protectors to his clients.

URTEL - Union de Radio et de Television Libre

tel: 223.22.55.63

fax: 223.22.51.09

BP E 1583

Bamako, MALI

Interview date: September 26, 1996

Interviewee: Moussa Keita, Secretaire General

Overview:

This Union works closely with the Ministry of Communication and Culture, providing them information on radio and television stations throughout Mali. They have five employees, and a Board of Advisors; their funding -though supposedly from the government- is primarily from donors and consulting fees. Aside from general support of the broadcast media in Mali, they do lobbying, and offer training and technical assistance to their members.

Keita has been affiliated with USAID for many years, and in 1990, was sponsored by USAID to receive training on intellectual property rights in the United States. Lately, he's in high demand as a speaker at conferences, and in helping develop unions similar to URTEL throughout Africa.

Interesting Points:

- As the communications infrastructure in Mali is weak, URTEL is hoping the Internet will alleviate some of the problems in communicating with rural radio stations. They have also begun to consider an information strategy within the union, and hope to soon develop a database to organize the information on stations, that which they share with the Ministry.
- Aside from communications, Keita was also considering the Internet as a resource for radio and television stations, both in terms of how the internet could be used to benefit stations directly, as well as benefitting the listeners through the re-transmission of the information found on the Internet.
- Hardware is a serious constraint for URTEL's Internet connectivity.

Inventory:

- no telephone lines - using neighbor's
- one PC
- no printer
- no modem
- no computer maintenance

The West African Enterprise Network/Mali (WAEN)

tel: 223.22.52.50

direct line: 223.22.09.86

Bamako, Mali

Interview date: September 25, 1996

Interviewee: Ibrahima Makanguile, Executive Committee

Overview:

WAEN was created in March, 1993 by private funds. There exist 450 organizations in 12 countries (300 business persons in 11 African countries, anglophone and francophone). The sector of activities include industry, agriculture, commerce and investments.

WAEN/Mali's primary activities include high volume export of rice, onion, beans, millet, corn and meat to Cote d'Ivoire, dialogue with allies on policy and regulatory issues affecting the private sector.

Their email connection is RioNet (ORSTOM) which they have had for the past year. They paid 3 million CFA to install Email and pay 100CFA/month for service. Reports are transmitted to other offices in other countries like to Accra. Email links are better in the other countries. All 12 countries have email connections. In the organization, 36 people correspond via email.

Mr. Makanguile is familiar with the WWW since their offices in Ghana and Senegal have access to it. The Internet has facilitated in locating buyers for their products. In the past Mr. Makanguile has flown to Paris just to try and find bean buyers.

WAEN's Regional Information Center is in Accra. In a newsletter dated February 1996 the Regional Information Center in Accra hired a Trade Information Coordinator to reply to the trade information requests from WAEN members and to publish the monthly "Trade Flash" and the quarterly "Networker". However each country's office has an information center staffed by one person. Information from Mali to the head office in Ghana usually consist of transmitting bulletins, correspondence, and annual reports.

There are 2 people trained to use the computers with plans to train 3 to 4 others. They do not plan to have one person responsible for using the Internet. The need is not perceived it would be to expensive and no need to specialize like this. Internet services that would be used by WAEN/Mali include:email, WWW, newsgroup and listserv all used to explore the exterior for buyers.

Publications given: The Networker - a newsletter of the West African Enterprise Network. It is published quarterly by WAEN: Accra, Ghana, email ababio@ncs.com.gh

Interesting Point:

WAEN's 1996 strategic action plan included the following activities: 1) dialogue with government on means of increasing Malian competitiveness in the region, with emphasis on financial instruments to assist national firms; 2) advocacy initiative to push adoption of legislation creating a joint government/private sector, non-artisan consultative committee to review business impact of proposed legislation/decrees; 3) network sustainability: recruitment of three new Network members and evaluation of new sources of revenue.

Inventory:

- 4 telephone lines
- 12 computers: 3 pentiums 100, a few portable and the rest 486's.
- 7 laser printers
- 3 CD-ROMS used for logistics.

World Education

tel: 223.22.02.91

fax: 223.22.02.91

BP 2137

Bamako, Mali

Interview date: September 27, 1996

Interviewee: Ms. Nancy Devine

Overview:

World Education is a PVO that partners with local NGOs to provide development assistance to Mali. They have primarily 3 target groups: 1) parent associations (i.e., APE) which help 500 local community schools; 2) urban community development organizations (i.e., youth businesses, sanitation, nonformal education) in 6 secondary cities; 3) credit unions.

Interesting Point:

- World Education held a forum where the Leland Initiative could introduce and promote email and

Internet use to local NGOs. Most NGOs don't have computers or adequate equipment or financial resources to use the Internet. However, from the meeting it was ascertained that Internet awareness and its capabilities were known. Most of the attendees knew that in the future they too will be connected.

The 15 organizations represented include:

1.Sahel Development Foundation (SDF)
Sangare Tiemoko Souleymanou, Director

2.Groupe d'Action pour le Developpement au Sahel (GADS)
Emile Arama, Coordinator

3.Association Jeunesse Action (AJA-MAL)

4.Association Conseil pour l'Action (ACA-Mali)
Jua Sumouma, President

5.Association Pour le Developpement et l'Appui aux Communaute (ADAC)

6.Association Malienne pour la Promotion des Juenes (AMPJ)

7.Conseils et Appui pour l'education a la base (CAEB) ONG
Yacouba Quattaud, Intern

8.Partenaires au developpement Integre (ONG PADI)
Duakite, Finance and Administrator

9.AMA PROS

10.Cabinet REcherche Action pour le Developpement
Abdoulkoubri Zeinou, Program Coordinator

11.Grade Banlieue
Bocoum Souleymane, Executive Director

12.ONG JIGI
Samantah Rennig, Volunter in AT

13.Institut pour l'Education Populaire
Debra

14.Association d'Appui a l'auto Developpment Communcitaire (AADEC)
Djoume Dyllar, Director

15.AED/Mali
Thiam Maurm, General Secretary

Annex C

Matrices

	<u>Summary</u>	Results of Leland Initiative	S.O. 3 (End User)	Assessment	
		<u>Mali, September 1996</u>			
			Organizations		

**Institutional
Communication
/ Information
Strategy**

**Currently
Producing and
Using
Publications,
Databases, etc.**

**Recognize
Potential
Contribution
of Internet to
Institutional
Mission**

**Champion -
Identified
Individual to
Serve as
Catalyst/Enthu
siast for
Internet**

**Telecommunica
tions and
Computer
Infrastructure;
Equipment and
Technical
Support Staff**

**Potential for
Sustainability**

APEP	Medium	Low	High	High	Medium	High
------	--------	-----	------	------	--------	------

CCA ONG	High	High	High	High	High	High
---------	------	------	------	------	------	------

CEFIB	High	High	High	High	Medium	High
-------	------	------	------	------	--------	------

Centre de Langue	Medium	Medium	High	Medium	Low	High
---------------------	--------	--------	------	--------	-----	------

CERDES	High	High	Medium	Medium	Medium	Medium
--------	------	------	--------	--------	--------	--------

CERPOD	High	High	High	High	High	High
--------	------	------	------	------	------	------

CLUSA/NCBA	Low	Low	Low	Low	Low	Low
------------	-----	-----	-----	-----	-----	-----

DNA COOP	Low	Low	Medium	Low	Medium	Medium
----------	-----	-----	--------	-----	--------	--------

ENSUP	Medium	Medium	High	High	Medium	High
-------	--------	--------	------	------	--------	------

GERDDES	High	Medium	Medium	Medium	Low	Medium
---------	------	--------	--------	--------	-----	--------

IER	High	High	High	High	High	Medium
-----	------	------	------	------	------	--------

Ministere de Sante: Cellule de Planification et de la Statistique	Medium	Medium	High	Medium	Medium	High
---	--------	--------	------	--------	--------	------

Mission de Decentralisation	High	Medium	High	High	High	High
--------------------------------	------	--------	------	------	------	------

Musee National	High	Medium	High	High	Medium	High
----------------	------	--------	------	------	--------	------

PRED	High		Medium			Low

PROTON	Medium	Low	High	High	Low	Medium
--------	--------	-----	------	------	-----	--------

SOMARC	Low	Low	High	Low	Low	Low
--------	-----	-----	------	-----	-----	-----

TATA Informatique	Low	High	Low	High	High	High
----------------------	-----	------	-----	------	------	------

URTEL	High	Low	High	High	Low	High
-------	------	-----	------	------	-----	------

WAEN	High	High	High	High	High	High
------	------	------	------	------	------	------

Summary Results of Leland Initiative S.O. 3 (End User) Assessment
Mali, September 1996

Organizations Currently Providing (or Plan to Provide) E-Mail Service

	Bintta	ORSTOM	SITA	Institut Microlab	Spider SARL
--	--------	--------	------	-------------------	-------------

Currently Providing Email Service	Yes	Yes	Yes	No	Yes
---	-----	-----	-----	----	-----

Training Provided	High	High	Medium	High	Medium
----------------------	------	------	--------	------	--------

Marketing	High	Low	n/a	Medium	Medium
-----------	------	-----	-----	--------	--------

Telecommunications and Computer Infrastructure and Equipment	High	High	High	High	High
--	------	------	------	------	------

Support Staff	High	High	High	Medium	Medium
---------------	------	------	------	--------	--------

Programming Capabilities	High	High	High	High	Medium
--------------------------	------	------	------	------	--------

Repair/Parts	High	Medium	Medium	High	Medium

Number of phone lines	6	3	8	2	2
--------------------------	---	---	---	---	---

Annex D

Survey Tools

USAID/MALI
BAMAKO

FAX: (223) 22-39-33

DE :Dennis Bilodeau, Chef de la Division Information et Communications

A :

de FAX :

de PGS :3 pages (y compris celle-ci)

DATE :18 Septembre 1996

SUJET :Initiative LELAND

Monsieur,

Suite à l'entretien téléphonique que vous avez eu avec l'USAID/Mali dans le cadre de la Mission USAID relative à l'Initiative LELAND, veuillez trouver ci-joint le document fournissant quelques informations sommaires sur cette initiative portant sur une technologie moderne d'échanges d'informations.

L'objectif de la Mission USAID est de discuter avec les utilisateurs potentiels de cette nouvelle technologie et d'identifier les besoins de connexion sur ce réseau d'échanges d'informations, dans le cadre d'un partenariat.

Je vous serais reconnaissant de bien vouloir nous **préparer des supports d'informations relatifs à votre organisation tels que les brochures, les bulletins ou autres publications (magazines) contenant des informations sur vos activités.**

Par ailleurs, l'équipe de l'USAID souhaiterait obtenir dans le cadre de l'entretien que vous voudrez bien lui accorder, les informations suivantes:

- Nombre de lignes téléphoniques:**
- Nombre de PC: #:-286 - 386 - 486 - Pentium - Portatifs**
- #OS:- DOS -Windows - Mac - OS/2 - Autre**
- Nombre d'ordinateurs multimédia:**
- Nombre d'imprimantes laser:**
- Nombre de modems avec/vitesse maximum: - 1200 - 2400 - 9600 - 14400 - 28800**
- Nombre de lecteurs CD-ROM; Titres CD-ROM:**
- Reseau Informatique? - oui (Modèle et Version):**
- Nombre d'employés pour l'entretien d'ordinateurs:**

Enfin, vous pourriez également indiquer la nature des informations dont vous avez souvent besoin dans le cadre du déroulement de vos activités.

En attendant de vous rencontrer très bientôt, je tiens à vous remercier d'avance pour l'intérêt que vous portez aux activités de l'USAID/Mali.

Veuillez croire, Monsieur, à l'assurance de ma sincère considération.

Annex F

Summary of USAID/Mali SO Team Meetings

Summary of USAID/Mali SO Team Meetings

USAID/Mali already had a strong foundation in the telecommunications sector with their Special Objective for Information and Communications (InfoComm), with "extended team members" from their 3 other Strategic Objectives. Through this Special Objective, we were able to get some background on the work that had been done in this area in Mali, as well as an appreciation for InfoComm's work in showing the mission how important information strategies are to successful development work.

Our briefing with Mission Director Joel Schlessinger covered Leland's SO3, and his interest in seeing USAID/Mali create synergy within itself and with its partners, especially those in the private sector. He was enthusiastic about this component of the Leland Initiative, and provided insights as to the value of the Internet in Mali.

To identify relevant and useful organizations to interview, we first met with USAID/Mali's Strategic Objective teams to introduce the Leland Initiative and answer any questions. Based on our goals in trying to identify the partners most ready for these technologies for potential pilot projects, the teams left us with lists of institutions and contact persons.

Though democracy and governance is a new sector to USAID/Mali, they have done a tremendous job designing their SO, and making it complimentary to the other SOs. Their process of ground-truthing, to confirm its relevance to the needs of the beneficiary, and their strategy of promoting the democratic governance and capacity building of NGOs through International PVO involvement is well constructed. Though they didn't refer to outside information sources during the creation process, they understand the value of information and the potential opportunities the Internet will bring to Malians.

The Youth SO was created under the 1996-2002 CSP with the focus on changing the social and economic behaviors of youth. The Youth SO is targeted to assist Malians 25 years old and younger (which is 3/4 of the total population) by specifically targeting activities in the health and education sectors. The SO team members are setting goals under a new SO while working in their areas of expertise. The SO team members are proponents of information sharing, however the greatest concern is whether local NGO's can maintain the monthly costs of Internet activities.

The Sustainable Economic Growth (SEG) Strategic Objective addresses the obstacles to increasing value-added growth on a sustainable basis in the major economic subsectors. Each of the SEG team members is asking hard questions about how his/her activities could incorporate an information component to support electronic communication and information sharing. There is a general consensus among the team members that there is a need by the USAID staff to encourage and support this activity.

Our debriefing to the mission gave preliminary findings, and an opportunity for us to answer questions about the Initiative's next steps. Following the debriefing, we gave an Internet demonstration open to all USAID staff and selected partners. Though the connection was slow, attendees saw the Internet working and sample WWW sites located which helped foster understanding about how the Internet can be used.

Annex G

References

References

Billings, Jim, Steve Furst, and Yacouba Konate. *Mali Telecommunications: Analysis and Recommendations for the Information and Communications Special Objective*. Abt Associates, June 1996.

FY 1997 Congressional Presentation: Mali. USAID, 1996.

Memorandum of Understanding between the Republic of Mali the United States of America (Leland Initiative MOU). USAID, August 6, 1996.

USAID/Mali Information & Communications Special Objective Result Plan. USAID, 1996.

USAID/Mali Results Review, 1996-2002. USAID, 1996.